

**WHAT IS CLAIMED IS:**

1. A sports ball comprising:  
a ball cover, and,  
disposed within the ball cover, a reinforced inflatable carcass comprising
  - (a) an inflatable bladder of resilient material;
  - (b) a web layer of thread disposed about an outer surface of said bladder; and
  - (c) an outer layer of resilient material adhered upon said web layer.
2. The sports ball of claim 1 wherein a major segment of an outer surface of said carcass is free of adhesion to an opposed inner surface of the ball cover.
3. The sports ball of claim 2 wherein at least 80% of the outer surface of the carcass is free of adhesion to the opposed inner surface of the ball cover.
4. The sports ball of claim 1 wherein the outer layer of said carcass comprises an elastomeric material.
5. The sports ball of claim 1 wherein the outer layer of said carcass comprises a resilient foam.
6. The sports ball of claim 1 wherein the web layer comprises a reinforcing material.
7. The sports ball of claim 1 wherein the ball cover comprises a material selected from the group consisting of leather and synthetic leather.
8. The sports ball of claim 1 wherein the ball cover has a thickness of less than about 3.5 mm.
9. The sports ball of claim 1 wherein the ball cover consists of a layer of synthetic leather.

10. The sports ball of claim 1 wherein the ball cover consists of leather having a thickness of less than about 1.5 mm.

11. The sports ball of claim 1 wherein the resilient layer has a thickness of from about 0.5 to 3.0 mm.

12. The sports ball of claim 1 wherein the resilient layer comprises a material selected from the group consisting of rubber, foamed rubber and EVA (ethylene vinyl acetate) foam.

13. The sports ball of claim 1 wherein the web layer comprises a thread selected from the group consisting of nylon, polyester and cotton threads.

14. A method of forming a sports ball cover comprising the steps of:

- (a) inflating a bladder to a predetermined circumference;
- (b) adhering a reinforcing thread about an outer surface of the inflated bladder, thereby to form a web layer on the outer surface; and
- (c) applying a resilient layer to the web layer to form a carcass.

15. The method of claim 14, for forming a sports ball comprising the further steps of:

- (d) inserting the carcass into a ball cover having an opening to receive the carcass; and
- (e) closing the opening in the ball cover to form a finished sports ball.

16. The method of claim 14 wherein the inflating step comprises inflating the bladder to a circumference of about 67.5 to 68.0 cms.

17. The method of claim 15 further comprising deflating the carcass between steps (c) and (d).

18. The method of claim 14 further comprising adhering the resilient layer to the web layer.

19. The method of claim 15 further comprising, between steps (c) and (d), curing the carcass in a heated mold.
20. The method of claim 14 wherein the resilient layer comprises a material selected from the group consisting of elastomers, natural rubber, and foams.
21. The method of claim 14 further comprising bonding the bladder, web layer and resilient layer securely together.
22. The method of claim 14 further comprising providing the ball cover by cutting a ball cover material into a predetermined number of panels in predetermined shape and stitching the panels together edge-to-edge, leaving an opening for insertion of the carcass.
23. The method of claim 22 wherein the stitching is performed by machine.
24. The method of claim 22 wherein the ball cover is stitched together inside out, and the method further comprises turning the ball cover right side out prior to inserting the carcass.
25. The method of claim 20 wherein the material is selected from the group consisting of rubber, foamed rubber and EVA (ethylene vinyl acetate) foam.
26. The method of claim 14 wherein the ball cover includes a lining layer.
27. The method of claim 14 wherein the thread comprises a material selected from the group consisting of nylon, polyester and cotton.